## INITIAL STATEMENT OF REASONS (Vessels Carrying Oil As Secondary Cargo) June 9, 2006

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (the Act) (see Government Code Sections 8574.1 through 8670.72) provides, in part, for the development of oil spill contingency plans for tank vessels, nontank vessels and marine facilities. These plans are to be used to prepare for the response effort that would be necessary in the event of a discharge of oil into the marine waters of the State. The Act authorizes the Administrator of the Office of Spill Prevention and Response (OSPR) to require that all necessary prevention measures are taken, and that sufficient response capability is available to handle a reasonable worst case oil spill. Additionally, the Administrator is required to establish regulations and guidelines that provide for the best achievable protection of the coastal and marine resources, and ensure that all areas of the coast are at all times protected by prevention, response, containment and clean-up equipment and operations.

Following the enactment of the above-cited legislation, and the establishment of the OSPR, regulations governing oil spill contingency plans were adopted to ensure that the affected public had clear and timely information regarding the development and submittal of these plans. Included in these regulations were provisions for the "Rating" of Oil Spill Response Organizations (OSROs) for specified services and time frames for response. Contingency plan holders that had a contract or other approved means for the booming, on-water recovery and storage, and shoreline protection services of a Rated OSRO do not have to list that OSRO's response resources in their plan.

The proposed amendments to the regulations are needed to implement the provisions of AB 715 (Chapter 748, Statutes of 2001), which outline the requirements for an OSRO "Rating" program, and require that contingency plan holders only contract with "Rated" OSROs. Additionally, a new approached to determining required shoreline protection resources have been included. Amendments of a clarifying or consolidating nature have also been included. The specific purpose for each adoption, amendment, or repeal contained in these proposed regulations is set forth below. Grammatical/technical changes have also been made throughout this subchapter, which have no regulatory effect). Note: The authority and reference citations have been updated throughout this subchapter to reflect the new provisions of AB 715 (Chapter 748, Statutes of 2001) and reorganization of the Act that was also brought about by that bill.

## Section 818.03 VESSELS CARRYING OIL AS SECONDARY CARGO (VCOASC) PLAN CONTENT

Subsection (a)(1) has been amended to include fax number and e-mail address contact information. Some of the individuals that need to be contacted live outside the United States and are difficult to reach over the phone. Fax and e-mail information will help facilitate contact with these individuals

Subsections (a)(2), (3) and (4) have been amended to allow that only contracted Qualified Individual (QI), Agent for Service of Process, and Spill Management Team services need to have an acknowledgement. In-house services do not need this acknowledgement.

Subsection (c)(2) has been repealed has been repealed as unnecessary. Demonstrating compliance with the safety measures required by other Federal, State, or local agencies is not needed in the plan, and does not need to be submitted with the contingency plan required by OSPR.

Subsection (d) has been amended for necessity.

Currently, the Navigational Hazard Analysis (identifying potential hazards in the areas where the tank vessel transits), Environmental Consequence Analysis (trajectories showing impact of spilled oil), and the Resources at Risk (the sensitive areas that may be impacted by an oil spill) were left to the plan holder to generate and provide in their plan. The plan holder was to identify response resources required to provide timely protection of the sites identified as potentially impacted. Many, if not most, plan holders relied upon the trajectories and resulting site impacts from the relevant ACP to determine their shoreline protection needs. These response resources could be acquired or contracted, and staged to provide requisite timely deployment. Although the requirements were fairly detailed, an objective assessment of how well the requirements were being met were difficult to determine. Trajectories were generated with various models, and the assumptions and conditions in the model varied with the preference of the modeler and their interpretation of regulatory requirements. The problem for OSPR's plan reviewer was their inability to validate the assumptions and inputs, and some data were not available. Economic and ecologic impacts were identified in varied and irregular patterns and often not with a sequential or hourly projection of impact. Amounts of resources and time frames for deployment were not clear, and they were often not linked with locations to be protected. Because times of impact and the response resource demand were not clear, it was not possible to determine if acquired or contracted resources were staged or staffed adequately to provide for timely deployment. Actual preparedness by the tank vessel in acquiring or contracting adequate resources and the capability of deploying those resources by vessel operators or their contractors was difficult to assess or drill. As a result it appeared that some plan holders achieved compliance without actual preparedness while others made good-faith efforts. As a consequence the playing field was uneven both among vessels and among contractors competing to provide shoreline protection. It was virtually impossible to determine if the Administrator's Best Achievable Protection (BAP) statutory mandate was being met because no standard emerged, outputs were variable and vague, nor was it feasible to exercise accountability.

To remedy this situation, OSPR initiated a new approach by assuming the responsibility of identifying BAP for shoreline protection needs and providing this information to tank vessel contingency plan holders. The purpose was to provide an objective BAP standard. This was done by determining the response resource demand sufficient to address most spills which could occur in the respective operational areas. If response resources could be deployed in a timely fashion to meet this standard, then the Best Achievable Protection would be available for most

conditions and spills. To accomplish this, the same conceptual process was used: oil spills were modeled from risk sites, using wind, current, and tide conditions which aggravate the spread of oil; the resulting trajectories were used to identify shoreline resources impacted and requiring protection, and the time by which they must be protected to prevent unmitigated impact. The sites, times of impact, and response resources needed were identified in a table form, in the Shoreline Protection Tables that have been incorporated by reference, herein.

OSPR relied upon the National Oceanic and Atmospheric Administration (NOAA) for their GNOME (General NOAA Oil Modeling Environment) model and modeling expertise for coastal and bay regions. The modeling objective was to identify spill trajectories impacting shorelines so schedules for timely shoreline protection deployments of response resources could be developed. Using the trajectories, timetables of spill impacts to sensitive resources were generated, and requisite shoreline protection resources identified from the respective Area Contingency Plans (ACPs, which were completed by the U.S. Coast Guard, state agencies and local government, with public participation, as required by the Oil Pollution Act of 1990 (33 USC 2701, et seq.)) Current CCR Subsection (g)(2)(A) (which implements Government Code Section 8670.28(a)(7)) specified that the required trajectories shall assume pessimistic water and air dispersion and other adverse environmental conditions (including tide, current, wind, and seasons) for the spread of oil. Consequently, model input variables were based on realistic local conditions which would result in adverse trajectories requiring an urgent need for deployment of substantial response resources. The scenarios identified demands for response staff and equipment to be prepared for most potential spill events. The model inputs and parameters were also selected to provide a representative trajectory regardless of variability between oil products and various possible shipping releases. The following were the criteria used.

°Locations selected were representative of the California coastal area and sub-regions where ships travel or where ships might pose threats. The specific release locations were those where oil could be released from ships with rapid spreading and serious risk to natural resources which in turn would require demanding mobilization of response resources.

°Environmental conditions were winds, tides, and currents which occur at that site and which tend to aggravate the spread of oil and maximize ACP sensitive site impacts and response resource demands.

°Volume and type of oil were selected to be widely representative of the products carried and fuels used by most vessels. The volumes and oil types selected resulted in the oil trajectory footprint being dominated by the environmental conditions and not the volume or type of oil.

°Releases were continuous, and of sufficient duration to aggravate the consequences.

Operational zones and release points were identified by OSPR staff with input from industry and environmental groups. The release points reflected both vessel traffic patterns and coastal exposure. Twenty areas were identified, 14 of which were related to vessels engaged in port activity; the other six locales were representative of releases which could occur from coastal passage traffic.

Once NOAA staff prepared the maps, these trajectory diagrams were reviewed by OSPR scientific field staff with local expertise in each area. These scientists were instructed to use their best knowledge and experience to interpret and "ground truth" the computer output; and based on this evaluation, they were tasked with determining 1) which sensitive sites would likely be impacted or threatened by the spill trajectory; 2) by what hour impact would likely occur; and 3) which protective strategy would be appropriate for the oil threat (since many sites have alternative strategies, different environmental conditions, or protection levels). The sites projected to be impacted are listed in the Shoreline Protection Tables (SP Tables) by the hour of impact. The response resources needed to provide primary shoreline protection were identified, using the information in the relevant ACP, and were organized by type: deployment staff, boom, anchors, boats, etc. These SP Tables show the sites to be protected, the hour by which they should be protected, and the response resources required to provide initial protection. This approach and the resultant SP Tables provide a standard for BAP for shoreline protection.

To assess the implications of this approach compared to historic levels of preparedness, a comparison was made between trajectories used in the San Francisco ACP and the new trajectories reflected in the SP Tables. In the mid 1990's, the San Francisco ACP developed several scenario trajectories which are adverse and have aggressive impact schedules for sensitive sites. Since some plan holders used these ACP trajectories for plan requirements and, presumably, had contracted with OSROs to provide adequate response resources capability to meet these impact schedules, these response schedules theoretically represent the current level of response preparedness. So, using these ACP scenario schedules provides a reasonable comparison between the shoreline protection standards that theoretically currently exist and what is being proposed in the SP Tables. To make this comparison, tables from historic spill scenarios in the 2002 ACPs were compared to the SP Tables for similar geographic regions. The comparisons for San Francisco Bay Central Bay and Suisun Bay indicate that comparable amounts of resources were required for both ACP-generated trajectories, and GNOME trajectories (upon which the SP Tables are based). The GNOME model was actually more generous in deployment time frames and equipment amounts in some instances.

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Post Spill Time Period	Response Resource Projections From		ranciso ntral B	•	San Fi Su	ranciso isun B	•
		Curtin	River	Other	Curtin	River	Other
		Boom	Boom	Boom	Boom	Boom	Boom
0-6	GNOME	12100	500	0	11300	2600	0
hours	BAP						
	2000-02 ACP	18000	5200	0	12950	5150	0
7-12	GNOME	2500	2500	4000	6000	4250	0
hours	BAP						
	2000-02 ACP	9100	3400	0	6000	0	0

13-24	GNOME	27900	4150	0
hours	BAP			
	2000-02 ACP	41500	4150	2600
25-48	GNOME	38200	7300	3600
hours	BAP			
	2000-02 ACP	7400	6000	2000

Figure 3 Comparison of Response Resource Schedule of ACP and GNOME Trajectories

The trajectory analyses and response timetables were shown to and reviewed by stakeholders including industry, OSROs, Area Committees, environmental groups. As a result of their input and concerns, the process was improved in several ways. Tables were shortened to included site-by-site response needs for the first 24 hours, but after that response resources were tabulated only at increments of 6 hours. This was accepted because OSROs felt that most response resources after 24 hours would be heavily augmented by non-local resources. These response resources still need to be identified in advance, but logistic plans for deployment would not likely improve response preparedness for operational periods beyond the first 24 hours.

OSPR agreed that sensitive site protection strategies within the first two hours would be impracticable. Since response in previous regulations granted a similar deferral, and since OSROs need time to mobilize, assess for safety, and deploy, this delay was deemed consistent with BAP. On the other hand, OSPR did require that any sites which might be exposed in the first two hours still needed protection since exposure might not result in irretrievable site destruction.

OSROs were concerned about dictating staff and deployment vessels in the SP Tables. OSROs have vessels with delivery capacities and speeds which can be quite varied. OSPR agreed that execution of the site protection strategies at the times indicated was paramount and that any combination of response resources capable of demonstrating deployments in a timely fashion would be certified as adequate. Consequently, allowances have been made in the regulations that OSROs may propose alternate vessels and staffing numbers to that which have been identified in the SP Tables. These proposed alternates will be tested in unannounced drills.

The ACP process is one of continuous improvement, as strategy refinements and strategy testing are continuing and updates to the ACP are made. There updates will be captured and incorporated in future regulation updates to the SP Tables using the procedures outlined in the Administrative Procedures Act. These strategy improvements implement the intent of Government Code Section 8670.28(a)(2), which requires that response standards regularly be improved to protect the resources of the state.

In summary, OSPR has addressed the statutory mandates for BAP for shoreline protection by creating SP Tables though a cooperative effort with NOAA, using NOAA GNOME oil spill model trajectories. NOAA modeling expertise and local OSPR scientific expertise combined to identify the consequences of these trajectories, including ACP sites impacted and impact times.

The resulting schedules of site protection strategies as listed in the SP Tables objectively define the envelope of response resources sufficient for most spills and conditions likely to occur in California. Former reliance upon plan holders to define the BAP for shoreline protection was problematic and produced neither a standard nor clear statements of trajectory assumptions, consequences, response resource needs, or logistics of timely protection. It was not clear from these plans what protection was being planned, nor was it clear if it was being met. Consequently, the shoreline protection outlined in the tank vessels response plans amounted to voluminous complexities that were, in some cases, of little value to either vessel operators or OSPR's plan reviewers. The benefits of this new approach are many. Contingency plan preparation is simplified, thereby removing a layer of complication and potential controversy regarding trajectories, resources at risk, and requisite response requirements. Review and approval of plans for shoreline protection has been reduced to a simple comparison of operational area needs (as outlined in the SP Tables), to the contracted response resources (e.g., Rated OSROs) to assure BAP is being met. There are now objective standards for shoreline protection that can be drill tested in real-time. The playing field among tank vessels has become more equitable by clearly defining the amounts and kinds of resources, and the times by which those resources must be deployed. The playing field among OSROs is also more equitable. because the requisite capability required to meet tank vessel requirements is better defined. This BAP standard incorporates ACP strategies and has focused Area Committees to make strategies more effective. In turn, the shoreline protection regulations may be improved as ACP strategies are improved.

Subsection (e) has been amended to clarify the containment booming and on-water recovery requirements that must be met, through a contract or other approved means. Language has also been added identifying Geographic Response Plan Areas, which are subsets of the ACP Areas. Some ACP committees have subdivided their areas based on distinct geographic features, so that spill response strategies and equipment, and resources at risk, can be more accurately identified.

Subsection (e)(4) has been amended to clarify the amount of on-water recovery equipment that must be available during transfer operations.

Subsection (e)(5)(B) has been amended to recognize that plan holders that have contracted with a Rated OSRO may be able to rely on information supplied by that OSRO in meeting the requirement for a description of on-water containment and recovery equipment, as listed.

Subsections (e)(5)(B)(4) has been amended to use the term "effective daily recovery capacity", which is the term used to replace the obsolete "derated capacity" (see definitions in Chapter 1, Section 790 of this Subdivision).

Subsection (e)(5)(B)(6) has been repealed as unnecessary. Requirements for vessel salvage operations are beyond the scope of these regulations.

Subsection (e)(6) has been removed as redundant. Subsection (e)(5)(B) already requires that the

plan holder contract for equipment appropriate to the area of operation, including shallow water environments, so listing it here is duplicative and unnecessary.

Subsection (d)(5)(F) contains some clarifying amendments which do not substantially alter the meaning of the text

Subsection (f) has been amended to incorporate the Shoreline Protection Tables, which details the amounts and time frames for shoreline protection response resources that the plan holder must now meet. (See the discussion for Subsection (d) for more information). The required percentage of dedicate shoreline protection resources by Geographic Region has been added to inform the regulated community of these requirements. Dedicated resources, verses resources owned or under the control of another company, are particularly an issue for shoreline protection. In areas of limited tank vessel traffic, having staff and boats fully dedicated to oil spill shoreline protection functions would be cost prohibitive, and is not warranted by the risk potential of oil spills in these areas. This table, added in [new] (f)(1), outlines the percentage of dedicated boats and staff by Geographic Region.

[New] Subsection (f)(1) has been added to explain the Small Harbor Table, which is part of the SP Tables that have been incorporated by reference. OSPR recognizes that some the requirements in the SP Tables may be too onerous for small tank vessels, which carry small amounts of fuel and/or are used for only a limited duration (i.e., dredge barge for a specific project). Since these small vessels predominately operate in the small harbors listed in the Table, reduced requirements have been identified for them, along with allowing non-dedicated resources. OSPR feels that the requirements for these small tank vessels are commensurate with the risk of an oil spill posed by the vessels.

Much of [old] subsection (f) has been repealed as the requirements are now replace by the requirements in the SP Tables.

[New] Subsection (f)(2) removes redundancy to requirements for shoreline protection, and is more specific in this subsection to the requirements for shoreline clean-up, including added to specify that sufficient personnel for shoreline clean-up operations shall also be identified in the plan.

Subsection (g) contains technical, grammatical changes without regulatory effect.

Subsection(h)(1) has been amended to implement Government Code Section 8670.25.5(d), which specifies that the reporting standard for oil spills is the one established in the California Oil Spill Contingency plan. This plan has established an oil spill to be any amount of oil into California waters. Also (h)(1)(A) now requires that whoever is making the notification of a spill must be fluent in English.

Subsection (h)(2)(A) has been amended to clarify that spills are to be reported immediately. Prior wording could be interpreted that this could be done after waiting 30 minutes after the

discovery of a spill.

Subsection (h)(5) has been amended for clarity. The plan holder is already given a check list to follow for providing spill information, most of which should be immediately available. The last sentence is being repealed as unnecessary.

Subsection (l) has been amended for clarity. This subsection now makes reference to the requirements in Section 820.01(a) which gives an extensive listing of the requirements of an adequate drill and exercise program. Instead of duplicating the requirements here, it seemed more prudent to direct the plan holder to the well defined drill and exercise section, which will be utilized by all of the regulated community (tank vessels, vessels carrying oil as secondary cargo, marine facilities, small marine fueling facilities, nontank vessels) Similar reference will be added to those sections as well.

The authority and reference citations have been updated to reflect the new provisions of AB 715 (Chapter 748, Statutes of 2001) and reorganization of the Act that was also brought about by that bill.

#### DOCUMENTS RELIED UPON

Technical, theoretical or empirical studies or reports relied upon:

°None

## **BUSINESS IMPACT**

The OSPR has made an initial determination that the proposed amendments will not have a significant statewide adverse economic impact directly affecting California businesses, including the ability of California businesses to compete with businesses in other states.

### SPECIFIC TECHNOLOGIES OR EQUIPMENT

The proposed amendments do not mandate the use of specific technologies or equipment.

### CONSIDERATION OF ALTERNATIVES

No alternative which was considered by the OSPR would be more effective than or equally as effective as and less burdensome to affected private persons than the proposed amended regulations

# COMPLIANCE WITH GOVERNMENT CODE SECTIONS 11346.2(b)(6), 11346.5, and 11349(f)

The regulations, which implement tank vessel contingency plan requirements, do not conflict with Federal statutes or regulations.